US/UK Future Flooding Workshop

Socio-economic Scenarios

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Scenarios:

Future Flooding

a tool for thinking about the future

- **The future is unlike the past and is shaped by human choice and action**
- **The future cannot be foreseen, but exploring the future can inform present decisions**
- **There are many possible futures; scenarios map a 'possibility' space**
- **Scenario analysis involves rational analysis and subjective judgement**

Scenarios are not intended to predict the fu

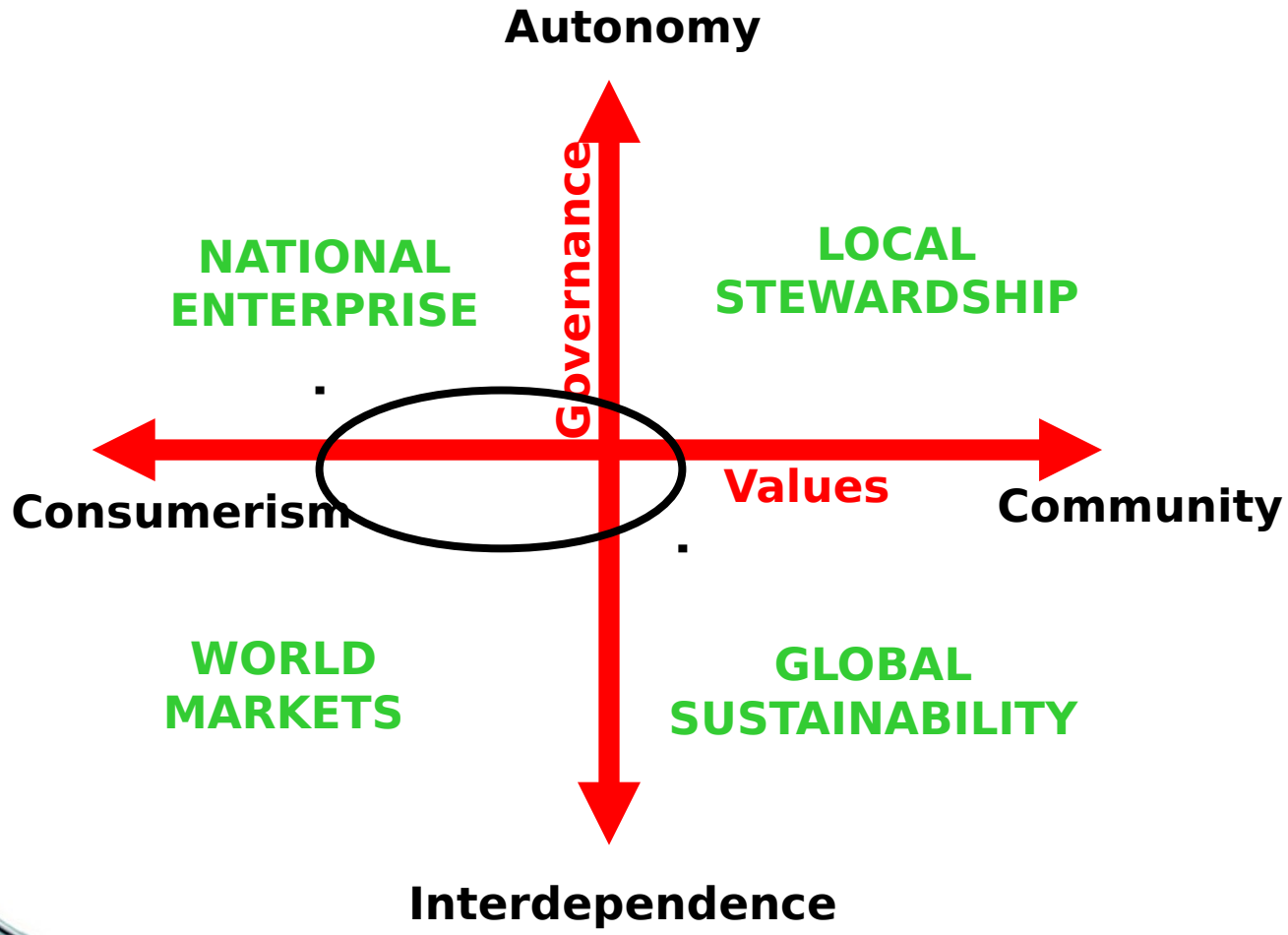
Scenarios:

Five major dimensions of change are recognised in the global future

- **Demography and settlement patterns**
- **The composition and rate of economic growth**
- **The rate and direction of technological change**
- **The nature of governance**
- **Social and political values**

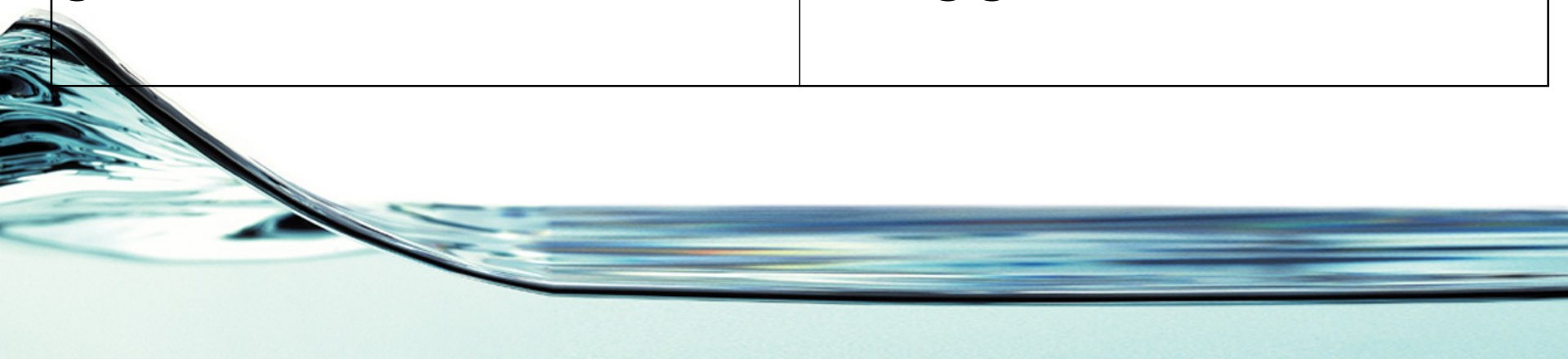
Foresight futures

Future Flooding



Foresight Futures

National enterprise **Market orientated approach, but with a regional or national focus and great diversity**	**Local stewardship** **Community orientated approach to the provision of goods and services, with no global overview and dominance of local approaches**
World markets **Market orientated approach to the provision of goods and services, with increasing globalisation**	**Global sustainability** **Community orientated approach to the provision of goods and services, with strong global institutions**



The context of flood management

World markets **Free market provision of measures to reduce impacts of flooding and hedge risks.** **Major engineering measures to keep pace with increasing risk.**	

The context of flood management

Future Flooding

World markets	**Global sustainability**
Free market provision of measures to reduce impacts of flooding and hedge risks.	**Strategic regulation of development, management of runoff and reduction of impacts.**
Major engineering measures to keep pace with increasing risk.	**Strategic soft engineering of rivers and coasts.**
	Universal protection through public-private schemes

The context of flood management

Future Flooding

	Local stewardship **National wealth does not keep pace with increasing risk.** **Abandonment of fluvial and coastal floodplains. Reinstatement of natural systems.** **Diversity of approaches across regions**
World markets **Free market provision of measures to reduce impacts of flooding and hedge risks.** **Major engineering measures to keep pace with increasing risk.**	**Global sustainability** **Strategic regulation of development, management of runoff and reduction of impacts.** **Strategic soft engineering of rivers and coasts.** **Universal protection through public-private schemes**

The context of flood management

Future Flooding

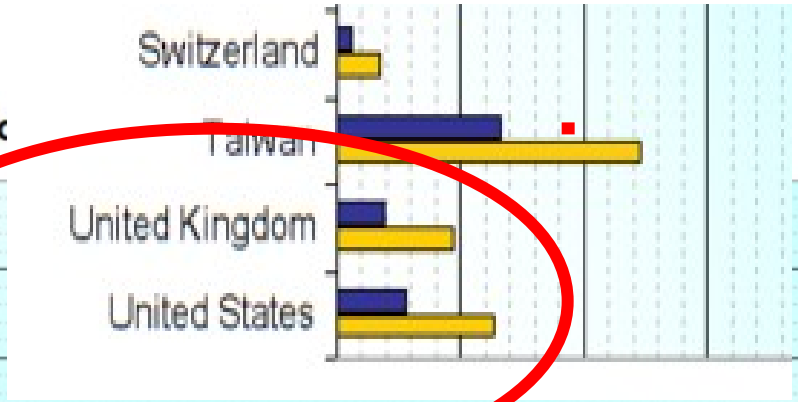
National enterprise	Local stewardship
Low regulation and limited emphasis on the environment. Piecemeal engineering measures to reduce risk, centrally-managed with limited local capabilities	National wealth does not keep pace with increasing risk. Abandonment of fluvial and coastal floodplains. Reinstatement of natural systems. Diversity of approaches across regions
World markets	**Global sustainability**
Free market provision of measures to reduce impacts of flooding and hedge risks. Major engineering measures to keep pace with increasing risk.	Strategic regulation of development, management of runoff and reduction of impacts. Strategic soft engineering of rivers and coasts. Universal protection through public-private schemes

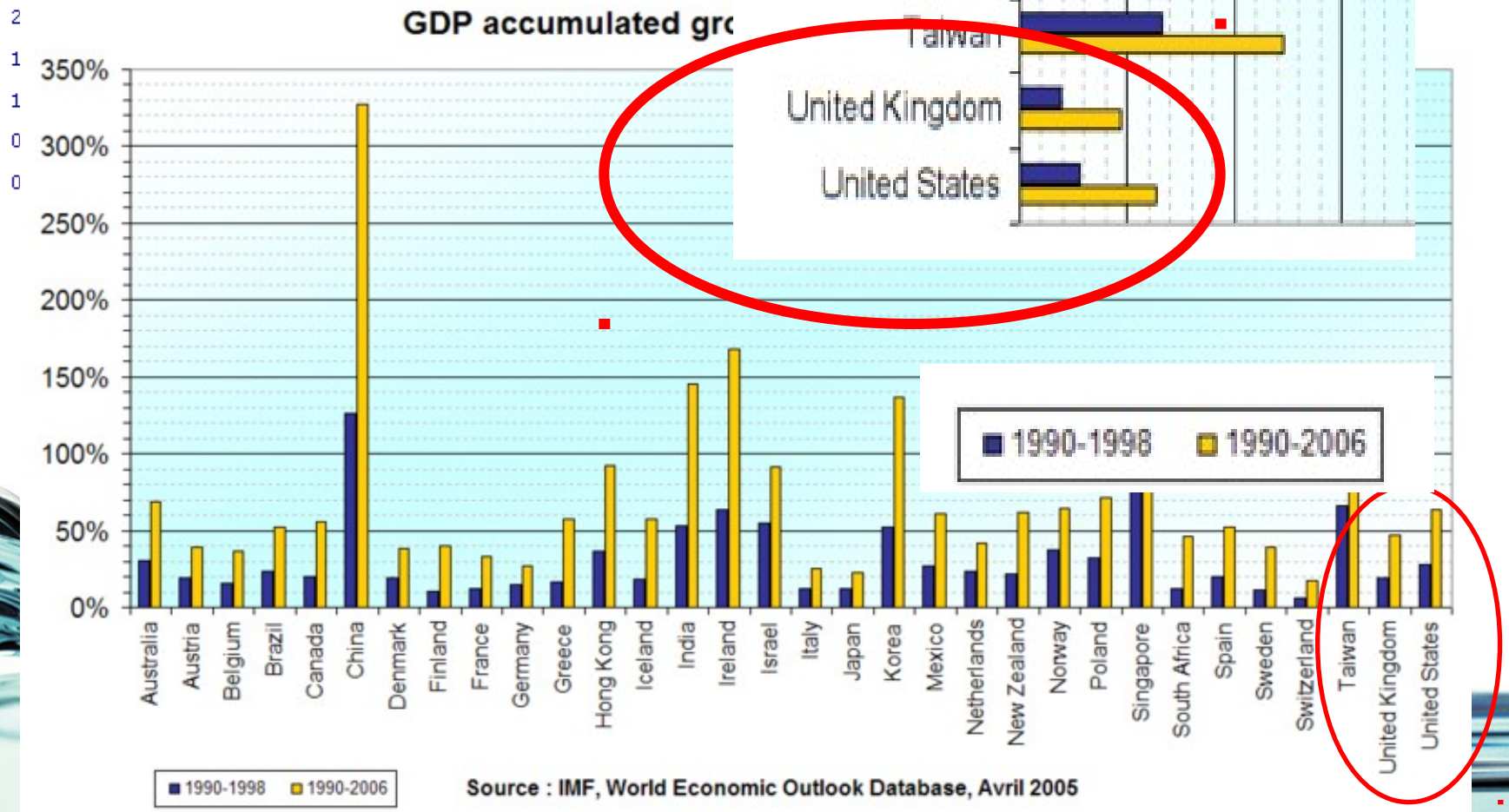
Scenarios: filling in the details

	Present day	World Markets	National Enterprise	Local Stewardship	Global Sustainability
Growth in GDP to 2080s	**1**	**14.1 times**	**4.6 times**	**2.6 times**	**8.1 times**
GDP (£ millions)	**1,068,980**	**15,113,908**	**4,911,148**	**2,782,193**	**8,633,180**
'Target' standards of flood protection	**1 (the same as today)**	**2 (twice today's standard)**	**2**	**0.75 (i.e. less than today's standard)**	**1**

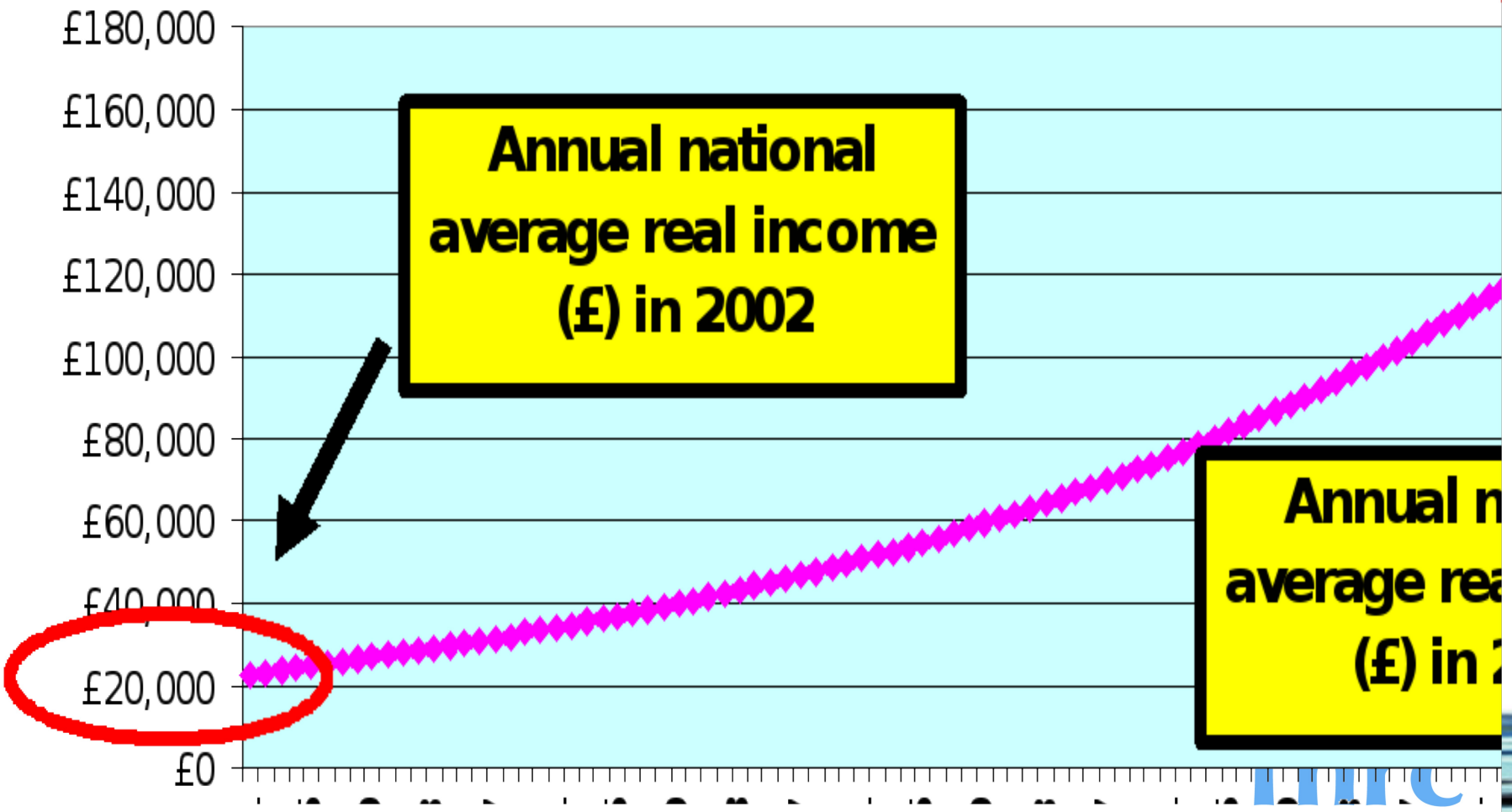
UK economic growth (GDP)

50% over 16 ye rs

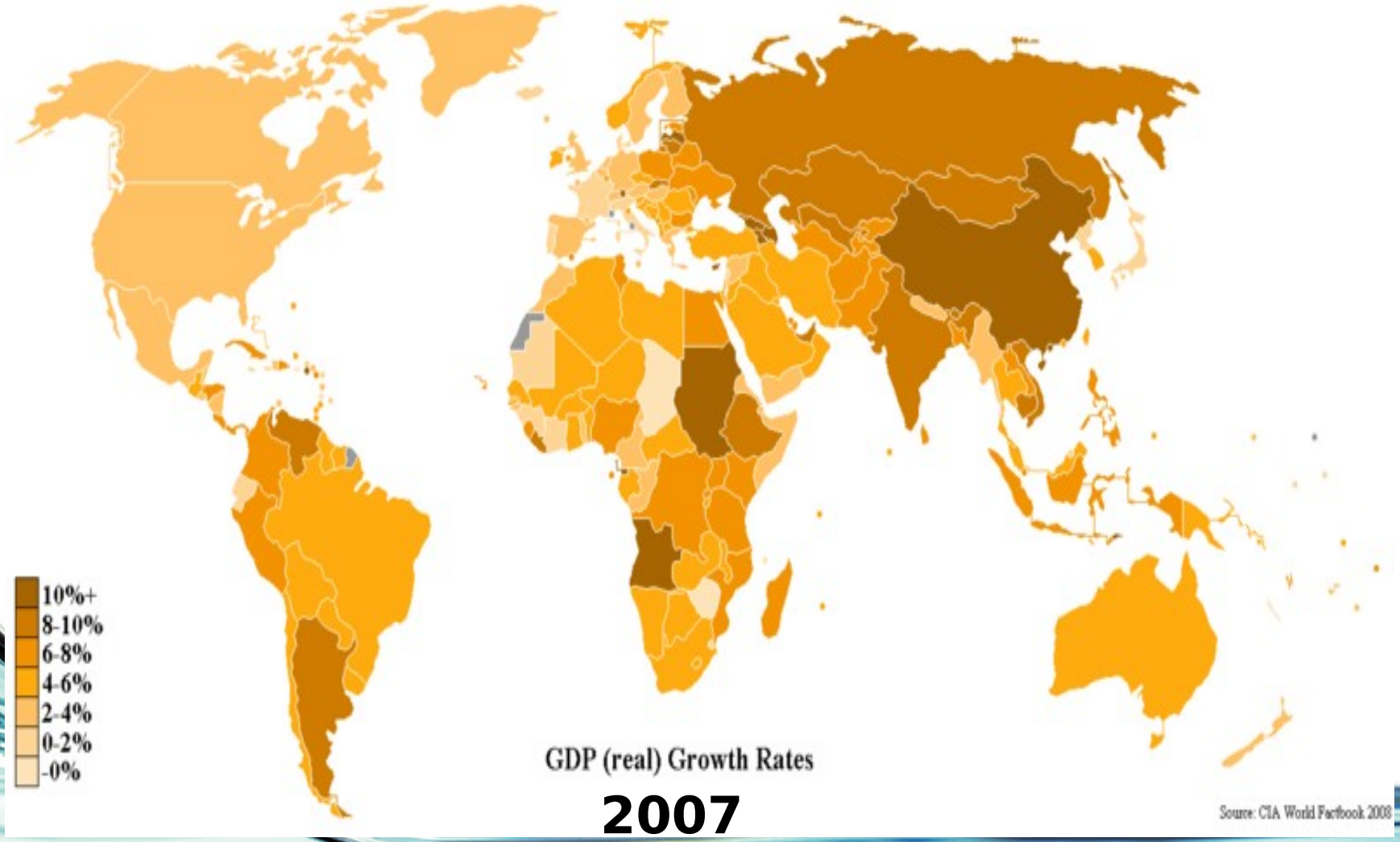




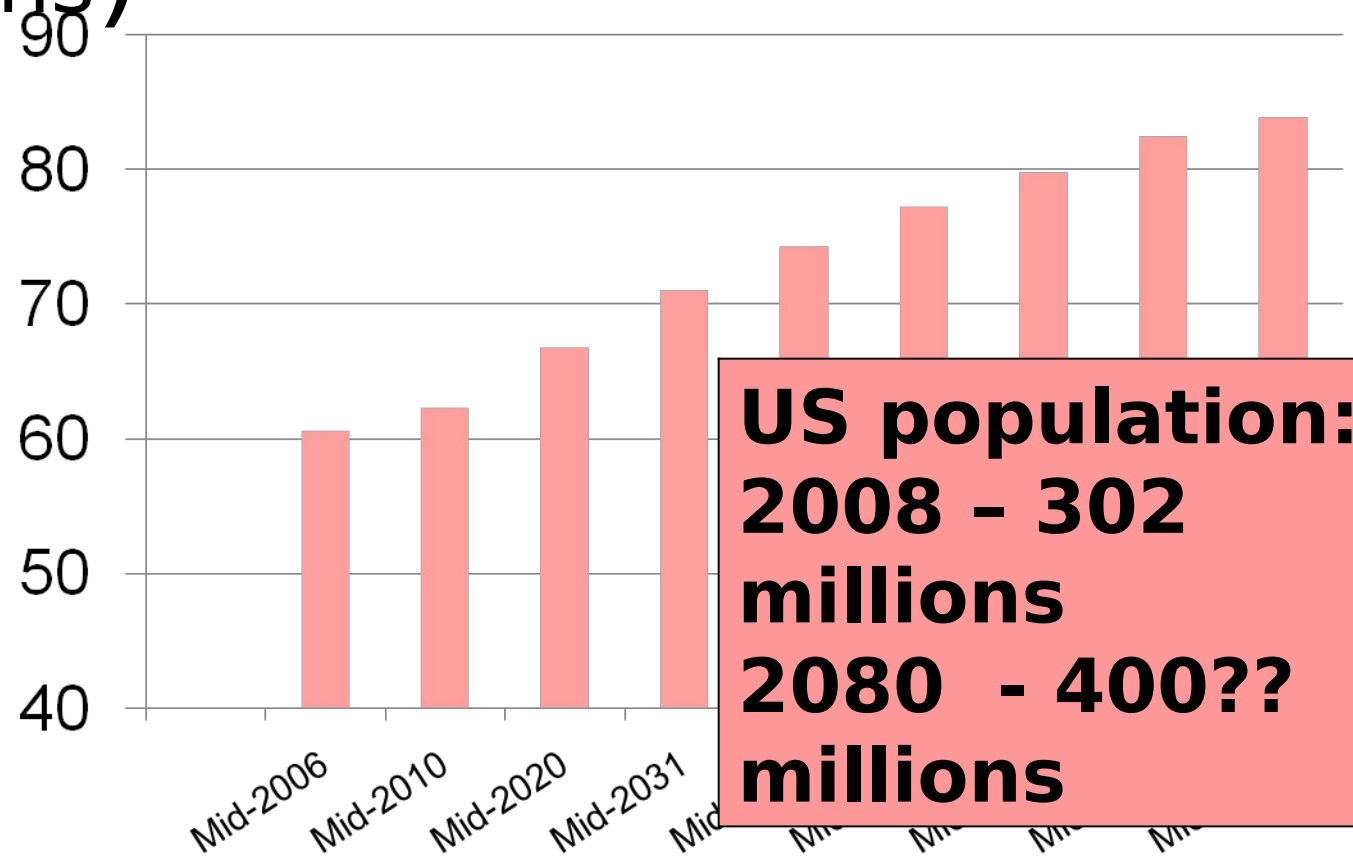
Increasing REAL wealth over 100 years @ 2% annual growth



The geography of economic



GB population forecasts (2007: millions)



US population:
2008 – 302 millions
2080 - 400?? millions

Source: Optimum Population Trust

Foresight Scenarios *plus* UKCIP02 climate change scenarios

Medium-high emissions

Medium-low emissions

High emissions and Low emissions

Low emissions

Socio-economic scenarios: Summary

- A tool for thinking about the future
- Scenarios are not intended to predict the future
- They need to link to climate change scenarios
- They need some credibility outside the project
- They need to be fully understandable
- They need stakeholder buy-in

How they were used in Foresight will be explained by Jon, Jonathan, Jim and Paul